

## METHODS OF INCREASING POLYPEPTIDE ACCUMULATION IN PLANTS

### ABSTRACT OF THE DISCLOSURE

5           The present invention provides methods and compositions directed to the  
production of polypeptides in plant protein storage tissue. Methods of the invention  
include methods for producing polypeptides in protein storage tissues by decreasing the  
level of protease activity in the plant protein storage tissue. Compositions of the  
invention include plants that are genetically modified such that the activity of one or  
10 more proteases is reduced or eliminated, transformed seeds obtained from these  
genetically modified plants, and sequences encoding a novel member of the VPE cysteine  
protease family found in seed,  $\epsilon$ -VPE. These methods and compositions find utility in  
altering the nutritional or other qualities of seed, and in producing useful proteins  
including pharmacological or industrial proteins.

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